# Commonwealth of Kentucky Division for Air Quality

## PERMIT APPLICATION SUMMARY FORM

Reviewed by: Ralph Gosney, P.E.

GENERAL INFORMATION:		
Source Name:	Noveon, Inc.	
Mailing Address:	2468 Industrial Pkwy, P.O. Box 1498, Calvert City, Kentucky 42029	
Date application received:	December 19, 2003; resubmitted on March 16, 2006; Supplemental information received on June 6, 2004 and September 7, 2006	
SIC/Source description:	2821, Plastic Materials, Synthetic Resins, and Nonvulcanizable Elastomer	
Source ID #:	21-157-00060	
Source A.I. #:	46166	
Activity #:	APE20040001	
Permit number:	F-05-051	
APPLICATION TYPE/PERMIT ACTIVITY	<u>Y</u> :	
[X] Initial issuance	[ ] General permit	
[ ] Permit modification	[X] Conditional major	
Administrative	[] Title V	
Minor	[X] Synthetic minor	
Significant	[ ] Operating	
[ ] Permit renewal	[X] Construction/operating	
COMPLIANCE SUMMARY:		
[ ] Source is out of compliant [X] Compliance certification	<u>•</u>	
APPLICABLE REQUIREMENTS LIST:		
[ ] NSR	[] NSPS [X] SIP	
[] PSD	[X] NESHAPS [ ] Other	
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:001, 1(116)(b)	
MISCELLANEOUS:		
[ ] Acid rain source		
[ ] Source subject to 112(r)		
[X] Source applied for federally enforceable emissions cap		
<u>=</u>	or alternative operating scenarios	
[ ] Source subject to a MAC		
	v-case 112(g) or (j) determination	
[ ] Application proposes nev		
[X] Certified by responsible		
<ul><li>[ ] Diagrams or drawings included</li><li>[ ] Confidential business information (CBI) submitted in application</li></ul>		
[ ] Pollution Prevention Measures		
[ ] Area is non-attainment (list pollutants):		
[ ] Thea is non-administ (not portadines).		

#### **EMISSIONS SUMMARY:**

Pollutant	Actual (tpy) <sup>1</sup>	Potential (tpy)
$PM/PM_{10}$	5.09	9.91
$\mathrm{SO}_2$	0.01	0.01
NOx	1.15 <sup>2</sup>	1.15
СО	0.68	0.96
VOC	3.16	< 90 <sup>3</sup>
Lead		
Individual HAP > 10 tpy	None	< 9 <sup>3</sup>
Total HAPs > 25 tpy	N/A	< 25 <sup>3</sup>

- 1. Actual emissions are from the Kentucky Division for Air Quality's 2005 Emissions Inventory printout report.
- 2. The actual emissions of NOx in the Kentucky Division for Air Quality's 2005 Emissions Inventory printout report was greater than the calculated potential emissions; therefore the actual NOx emissions were set equal to the potential emissions.
- 3. Federally enforceable source emission limitations established in the permit.

#### **SOURCE DESCRIPTION:**

Noveon, Inc. has accepted permit conditions to limit the facility's potential to emit (PTE) below major source thresholds, and the source is classified as a "nonmajor source" pursuant to 401 KAR 52 and 40 CFR 70. Therefore, the source is subject to the provision of 401 KAR 52:030. Inclusive of the emission and operating caps described below, the facility qualifies as a conditional major/synthetic minor emission source by use of control devices to limit emissions.

#### **EMISSION AND OPERATING CAPS DESCRIPTION:**

Marshall County is designated as attainment for all criteria pollutants. To preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, and 401 KAR 52:020, *Title V Permits*, the following sourcewide emission limits shall apply:

- i. Volatile organic compound (VOC) emissions: 90 tons per year;
- ii. Combined hazardous air pollutant (HAP) emissions: 22.5 tons per year; and
- iii. Single hazardous air pollutants (HAPs) emissions: 9 tons per year.

In order to make the conditional major/synthetic minor emission limits enforceable as a practical matter, Noveon, Inc. has voluntarily accepted limits of Carbopol® production in any twelve (12) consecutive month period as follows:

- i. Carbopol® using benzene as the carrier: 14,000,000 lbs per year;
- ii. Carbopol® using ethyl acetate as the carrier: 12,000,000 lbs per year; and
- iii. Carbopol® using the cosolvent as the carrier: 22,556,000 lbs per year.

### **OPERATIONAL FLEXIBILITY:**

There were no alternative operating scenarios proposed by the source; However, alternate operating scenarios are included in the permit based on applicable requirements in 40 CFR Part 61 regulations.